A construção da cidadania e o incentivo à participação social no processo de formação da cidade a partir de práticas pedagógicas construtivistas

Maria do Carmo de Albuquerque BRAGA[1]
Ângela Cordeiro Tenório dos SANTOS[2]
Catarina da Silva SOUZA[3]

Resumo
A ideia de trabalhar o conhecimento sobre leis urbanísticas em escolas públicas de Garanhuns/PE, entre fevereiro e dezembro/2018, surgiu do resultado da pesquisa PIBIC 2016-2017. Selecionou-se duas das escolas de ensino fundamental trabalhadas: Instituto Presbiteriano de Heliópolis, turma do 6° ano; e, Escola Silvino Almeida, turma do 5° ano. O objetivo foi demonstrar o incentivo aos jovens na construção da cidade e da cidadania no ambiente escolar, através de práticas pedagógicas construtivistas. Adotou-se o método interpretação de sentido conforme Gomes (2011), em duas etapas: aplicação de questionário e análise de imagem, em papel A3, de uma cidade fictícia, considerando temas abordados durante o período. Como resultado, verificou-se clara demonstração do incentivo dado através das colocações dos alunos. A compreensão da necessidade de participar, conhecendo e respeitando seus direitos e deveres reforçou o entendimento que a escola é o *locus* ideal para essa construção, trabalhando suas vivências e experiências cotidianas.

Palavras-chave: Cidadania. Conhecimento. Construtivismo. Interpretação de sentido.

[1] PhD in Urban Development from the Federal University of Pernambuco (UFPE). Associate Professor III at the Federal University of Agreste of Pernambuco (UFAPE). Member of the Social Movements and Urban Space Research Group (MSEU/UFPE) and the Geography and Territorial Formation of Brazil Research Group (GEOFORM/UFRN). https://orcid.org/0000-0002-5751-8930.
E-mail: maria.braga@ufape.edu.br
[2] Bachelor's degree in Pedagogy from the Federal University of Agreste of Pernambuco (UFAPE). Contracted teacher in the Municipal Network of Garanhuns – PE, working in early childhood education. https://orcid.org/0000-0001-8454-3106.
E-mail: angelatenorio94@outlook.com
[3] PhD candidate in the Graduate Program in Education (UFPE). Adjunct Professor at the Federal University of Agreste of Pernambuco (UFAPE). https://orcid.org/0000-0003-0095-4229
E-mail: catarina.souza@ufape.edu.br

The construction of citizenship and the encouragement of social participation in the process of city formation based on constructivist pedagogical practices

Maria do Carmo de Albuquerque BRAGA
Ângela Cordeiro Tenório dos SANTOS
Catarina da Silva SOUZA

Abstract

The idea of working on urban regulation knowledge in Garanhuns/PE public schools, between February and December/2018, came out of one 2016-2017 research work. Two of the examined elementary schools were selected: Instituto Presbiteriano de Heliópolis, 6th grade class; and Silvino Almeida School, 5th grade class. The objective was to demonstrate the incentive given to young people in the construction of the city and the citizenship awareness in the school environment, all through constructivist pedagogical practices. The adopted method of meaning interpretation was Gomes's (2011) in two stages: application of questionnaire and image analysis, on A3 paper, of a fictional city, considering topics covered in the period. This resulted on a clear demonstration of the incentive given through students' opinions. The understanding of the need to participate, knowing and respecting rights and duties reinforced the understanding that the school is the ideal locus for this construction, working students' everyday experiences.

Keywords: Citizenship. Knowledge. Constructivism. Interpretation of meaning.

La construcción de ciudadanía y el fomento de la participación social en el proceso de formación de ciudad a partir de prácticas pedagógicas constructivistas

Maria do Carmo de Albuquerque BRAGA
Ângela Cordeiro Tenório dos SANTOS
Catarina da Silva SOUZA

Resumen

La idea de trabajar el conocimiento sobre leyes urbanísticas en escuelas públicas de Garanhuns/PE, entre febrero y diciembre/2018, surgió del resultado de la encuesta PIBIC 2016-2017. Se seleccionaron dos de las escuelas primarias: Instituto Presbiteriano de Heliópolis, clase de 6to grado; y Escuela Silvino Almeida, clase de 5° grado. El objetivo fue demostrar el incentivo a los jóvenes en la construcción de ciudad y ciudadanía en el ámbito escolar, a través de prácticas pedagógicas constructivistas. El método de interpretación de sentido fue adoptado, según Gomes (2011), en dos etapas: aplicación de un cuestionario y análisis de imagen, en papel A3, de una ciudad ficticia, considerando temas tratados en el período. Como resultado, hubo una clara demostración del incentivo dado a través de las prácticas de los estudiantes. La comprensión de la necesidad de participar, conociendo y respetando sus derechos y deberes, reforzó el entendimiento de que la escuela es el lugar ideal para esa construcción, trabajando con las experiencias cotidianas de los estudiantes.

Palabras clave: Ciudadanía. Conocimiento. Constructivismo. Interpretación del significado.

Introduction

In the city, there are discrepancies both in the use of spaces and in the distribution of necessary facilities to provide quality of life to society. Oliveira, Lopes, and Sousa (2016, p. 3) highlight that "the city is a human construction, a materialized form derived from the urban content produced by specific social relations." Thus, as people modify places, they are also modified by them.

Santos (1996–1997) emphasizes that citizens' rights are revered as something positive in society, but he notes that these rights are not enjoyed by everyone, only by a few. In this work, the author uses the expression "mutilated cities" to refer to the fact that people with status and power enjoy these rights while they are denied to others.

Silva (2000) discusses the relationship between rights and public policies. According to the author, for people to enjoy their rights (civil, political, and social) and fulfill their duties, it is necessary for them to have the means to exercise their citizenship, to be aware of the mechanisms to enforce these rights, and to understand how society is organized to guarantee them. Thus, Bobbio (1992, cited in Silva, 2000, p. 19) explains that it is not enough to have laws, declarations, or public policies; what is necessary is their actual implementation. Silva (2000) emphasizes that the school, as a space for civic education, can be fundamental in the development of individuals, enabling the realization of rights in practice.

Therefore, it is understood that the construction of the city is inseparable from citizenship. To exercise citizenship, people need knowledge about urban planning laws, citizens' rights and duties, so that they can contribute to the process of building the spaces that make up the city. In this sense, current urban legislation includes legal instruments for social participation in the process of territorial planning.

To ensure the proper use of urban property for the common good, Law 10.257/2001, better known as the City Statute, was created. One of its main objectives is to guarantee social participation in the process of urban planning and management, with the aim of minimizing the problems arising from this process.

As a federal law that provides guidelines for fair and participatory territorial planning, the City Statute adopts the Participatory Master Plan as the highest law within a municipality to guide the ongoing process. It is through the Master Plan that fair territorial planning is ensured, through social participation and the creation of complementary laws. Thus, citizens are invited to participate in the

process of city-building; however, for this to happen, it is necessary for the public authorities not only to promote knowledge of these laws but, above all, to encourage people's participation in this domain.

Based on the results obtained from a scientific initiation research conducted between 2016 and 2017 at the Federal Rural University of Pernambuco in Garanhuns, it was found that people lacked sufficient knowledge about their rights and duties as citizens participating in the process of city-building. This lack of knowledge resulted in a lack of interest in participating in public decision-making. This observation led the authors to develop a project aimed at changing this reality. One of the possible approaches they adopted was to encourage students in local public schools, preparing them for the exercise of participatory citizenship through content that aligned with their daily experiences and realities.

Thus, the present article aims to demonstrate how to encourage the development of citizenship and social participation in the process of city-building, specifically with students from local public schools. It seeks to answer the following guiding question: how can we encourage young students to participate in the city-building process, understanding their rights and duties as active citizens?

To achieve this objective, a strategy was employed that utilized a method incorporating quantitative data, complemented by qualitative data, as established in the interpretive approach according to Gomes (2011).

The project was carried out in three stages. The first stage involved creating a schedule in collaboration with school administration and teachers, considering 11 pre-selected topics. The second stage consisted of presentations and debates on the selected topics, according to the established schedule. Finally, the third phase was dedicated to evaluating the content developed and discussed with the students throughout the project.

Upon completing the project, it was observed that the evaluation phase results indicated that the students were indeed encouraged to participate in the city-building process. This was evidenced by analyzing the students' responses in the activities developed, compared with the debates that took place from the beginning of the project, when a lack of knowledge on the topic, particularly regarding urban planning legislation, was evident.

It was also observed that the school, as a formative space, needs to update its curricular content to better encourage citizenship practices in the daily lives of its students.

This article is structured into four parts. The first part addresses the concepts and theories related to pedagogical practices that served as the foundation for the development of the work. The second part details the methodological procedures under which the project was carried out. The third part

describes the actions undertaken and how they were developed, including the evaluation process at the final stage of the work. Finally, the fourth and last part presents not only the considerations regarding the activities carried out but also the overall evaluations of the project, thereby addressing the initial guiding question.

School, Rights, and Duties: Pathways to Building Citizenship

The study on education for citizenship in this work focuses on pedagogical practices related to city-building, preparing individuals to live in society, particularly in the creation of the collective and private spaces that make up the city. In this context, the school emerges as a conducive environment.

The school plays a fundamental role in the formation of citizenship. It is through the school that scientific, social, cultural, historical, and other knowledge is developed, aiming to provide full conditions for the exercise of citizenship. The 1988 Federal Constitution of Brazil (CF/88) and the Law of Guidelines and Bases of Education (LDB-1996) emphasize that it is the duty of the state and the family to ensure the full development of individuals, preparing them for the exercise of citizenship.

In its Chapter I, Article 5, which deals with individual and collective rights and duties, the CF/88 emphasizes that men and women are equal before the law, without distinction of any kind, and that they have individual and collective rights and duties to be enjoyed and fulfilled. Therefore, citizens are all people, without distinction of ethnicity, culture, race, or nationality, and should have access to human rights (life, liberty, equality, security, and property); social rights (education, leisure, housing, transportation, health, basic sanitation, infrastructure); and civil and political rights (the right to vote and be elected, to participate in government decision-making, to nationality and identity, and to organize and engage in political demonstrations). These rights, governed by law, apply to all citizens, as do the corresponding duties. Among the political rights mentioned, social participation in the public decision-making process is highlighted, with the aim of encouraging citizens to actively participate.

The concept of a citizen is associated with the exercise of citizenship and with people's participation in the pursuit of better living conditions. Afonso (2012) emphasizes that the rights of citizenship are those outlined in the 1988 Federal Constitution, such as education, health, leisure, security, among others. Human rights, on the other hand, are those aimed at guaranteeing human dignity. The right to citizenship and human rights are linked in the author's perspective.

> Human rights are indivisible, meaning that everything that ensures the dignity of the human being must be equally valued and defended as a collective set of rights: life,

> liberty, education, food, and so on. Citizenship can be understood as the right to have rights and also as the condition for the full exercise of these rights, which should not remain only on paper nor exclude any segment of the population. Instead, it must extend to all social groups. Of course, we are well aware that there are differences in society, both in terms of access to rights (income, education, and others) and in terms of gender, ethnicity, age, and so on (AFONSO, 2012, p. 9).

Oliveira and Costa (2007) emphasize that citizens are those who enjoy civil, political, and social rights, which implies that the individual has the autonomy to exercise these rights guaranteed by law.

In the city, inhabitants are constantly seeking better living conditions, access to urban facilities, infrastructure, basic sanitation, housing, health, education, and more. Human rights and citizenship rights, therefore, permeate collective life and are fundamental to the quality of life.

Oliveira (2001) highlights that cities originated from the need to organize urban spaces for collective life among people, involving communication and the exchange of various resources. In this process of constructing urban space, many problems arise in people's lives. Among these problems, the disorganization of space and the inequalities in the distribution of necessary facilities for quality of life are particularly prominent. This situation leads to disputes and conflicts among the inhabitants of a city.

> Urban problems are not new. They are part of the daily reality of our cities and are increasingly growing: distant peripheries lacking essential services and urban facilities; slums, invasions, informal settlements, and flooded areas emerge and expand; speculative land retention is constant; unprecedented density and verticalization are frequently observed; pollution of water, soil, and air reaches significant proportions; among other varied and negative aspects (OLIVEIRA, 2001, p. 2).

Based on this understanding, it is observed that the responsibility for building urban spaces in a just manner is not solely the government's but also the people's, who need to be informed about how to participate in public decisions in their city, bringing their experiences and potential solutions to the debate with the aim of achieving a healthy collective environment.

In this context, as mentioned earlier, schools can play a crucial role in building a just and harmonious city by fulfilling their social function of educating young students to become active future citizens in the construction of their city. But how can this occur?

Basic knowledge about city-building should be taught in schools, particularly through a multidisciplinary approach, although it is within Geography classes that this debate can be most effectively consolidated due to the subject's content. This is because Geography is the science responsible for studying human relationships with space, as well as the transformations and

modifications of that space. Callai (2003) emphasizes that there are three fundamental reasons to study Geograph:

> First: to learn about the world and obtain information, which has long been the primary reason for studying geography. Second: we can add that geography is the science that studies, analyzes, and attempts to explain (understand) the space produced by humans. By studying certain types of spatial organization, the aim is to understand the causes that gave rise to the forms resulting from the relationships between society and nature. To comprehend these, it is necessary to understand how people interact with each other. Third reason: it is not about the content itself, but rather a greater objective that encompasses everything else, which is the formation of the citizen. Equipping students, providing them with the tools to truly build their citizenship, is the goal of the school, and geography plays a significant role in this process due to the topics and subjects it addresses (CALLAI, 2003, p. 57).

Thus, several key concepts are explored in Geography, with the main ones being place, landscape, region, space, territory, and nature (Base Nacional Comum Curricular - BNCC, 2017). Callai (2003, p. 61) emphasizes that "by constructing concepts, the student truly learns, for example, to understand a map, to comprehend the terrain, what a region, nation, or municipality is." This construction of concepts, aligned with the reality experienced by students, cannot be delivered by the teacher in a ready-made, finished form, nor can the content be developed in isolation from their daily lives. In this context, the study of the urban environment is relevant, as it is in the city where everyday experiences and encounters occur.

In the same vein, Gadotti (2003, p. 136) highlights that the "city is culture, creation, not only through what we do in and with it, but also through what we create in and with it. It is also culture through the aesthetic or awe-inspiring gaze we cast upon it." Barros (2007, pp. 22-23) supports this view by analyzing various concepts of the city, noting that, as a human artifact, "the very people who come together to form a city begin to influence its formal destiny from the very first moments, relying on their own images".

Thus, it is understood that the school can foster a sense of belonging among young people as individuals who hold rights and duties, encouraging their participation in public decision-making.

Education for Citizenship through Pedagogical Practices

Despite being aware of the discussed concepts and the importance of social participation in city-building processes, it is understood that there is no guarantee that students will learn or develop a critical and reflective sense about the topic. This leads us to suppose that knowledge construction should be based on constructivist pedagogical practices, using methods and procedures developed by teachers to make the content meaningful for students.

When considering the idea of encouraging students to actively participate in city-building through citizenship education, it is implied that constructivist pedagogical practices are more suitable. This does not involve seeking support in constructivist theory, but rather in constructivist pedagogical practices. Regarding constructivism, Becker (2009, p. 2) highlights that it is the "idea that nothing is, strictly speaking, ready or finished, and that, specifically, knowledge is never given as something complete." The author also emphasizes that in practice, the constructivist teacher views the student as a unique and active subject in interaction with the social and cultural environment.

Concerning constructivist theory, its pioneer, Jean Piaget, asserts that the development of a child's intelligence happens progressively as they grow and begin to perform small actions. In this context, Becker (2009, p. 2-3) notes that "we must not forget that in PIAGET, learning only makes sense insofar as it coincides with the process of knowledge development, with the movement of the structures of consciousness."

These considerations show that employing constructivist pedagogical practices is not necessarily tied to constructivist theory, as evidenced by the work of Paulo Freire, whose teaching method was developed within a constructivist perspective, without, however, labeling himself as a constructivist theorist.

In his work *Pedagogy of Autonomy*, Paulo Freire (1996) emphasizes the need for a dialogical practice between educators and learners in the learning process. In the author's view, traditional education is related to the banking model of education, as it treats knowledge as something finished, without reflection, where the student is a mere recipient of information. He also points out that "knowledge is a donation from those who consider themselves wise to those who consider themselves ignorant" (FREIRE, 2005, p. 66). From this perspective, students are like "empty vessels" being filled with knowledge transferred from teacher to student. In contrast, Freire (2005) advocates for a liberating education, where the educator is in constant dialogue with the learners. This relationship is not authoritarian but liberating. The student is an active subject in the construction of their knowledge, acting upon practice and reflecting on it, while the teacher acts as a mediator of knowledge.

Freire (1996) emphasizes that the construction of knowledge should be connected to the students' everyday lives. He notes that "to teach is not to transfer knowledge, but to create possibilities for its own production or construction" (FREIRE, 1996, p. 47). Thus, the construction of knowledge should be mediated by the teacher, taking into account, in the author's view, the awakening of curiosity that drives and motivates students.

> As a teacher, I must understand that without the curiosity that drives me, that unsettles me, that compels me to seek, I neither learn nor teach. Exercising my curiosity in the right way is a right I have as a human being, and it corresponds to the duty to fight for it the right to curiosity. With domesticated curiosity, I might achieve the mechanical memorization of the profile of this or that object, but not real learning or a thorough understanding of the object. The construction or production of knowledge about the object involves exercising curiosity, its critical capacity to "distance itself" from the object, to observe it, to define it, to dissect it, to "encircle" the object or approach it methodically, its ability to compare, to question (FREIRE, 1996, p. 85).

Freire (1996) emphasizes that in the act of teaching and learning, the teacher must be a subject with intrinsic curiosity: "In this sense, a good teacher is one who, while speaking, manages to bring the student into the movement of their thought. Their lesson is, therefore, a challenge and not a 'lullaby'" (FREIRE, 1996, p. 86).

In teaching practice, teachers need to use methods that enable the construction of knowledge. In the traditional model of education, curiosity, critical thinking, and reflection may not occur. This model often presents a demotivating format of teaching, focused on content memorization, which does not constitute learning that encourages reflection.

Using methods that stimulate students' interest allows for their active participation and, consequently, the construction of their knowledge. Questions, inquiries, reflections, critical thinking, and curiosity make the content more challenging, as it is not presented in a loose or finished form.

> Before any attempt to discuss techniques, materials, or methods for a dynamic lesson, it is essential absolutely necessary that the teacher is grounded in the understanding that the cornerstone is human curiosity. It is curiosity that drives me to question, to know, to act, and then to question more, and to recognize anew (FREIRE, 1996, p. 86).

Therefore, understanding the importance of multidisciplinary teaching, particularly Geography, for the construction of citizenship and the city, the school can and should promote knowledge in a reflective and critical manner. The curiosity highlighted by Freire (1996) is fundamental in capturing the attention of young people on issues that permeate both collective and individual life, fostering a spirit of inquiry and questioning. Teaching strategies should build on what students already know about the content, connecting theory to practice. As such, Libâneo (2009, as cited in Cavalcanti, 2010, p. 1) emphasizes that "[...] it is the teacher's role to guide, direct, and intervene in students' motivations, providing mediation."

The authors Zwestch and Zwestch (2015) emphasize that:

> For the process of building citizenship to be realized, the teaching staff must engage students' interest by employing various learning methodologies, discussing

> contemporary issues, and connecting these to the realities of all students. This involves considering diverse pedagogical relationships and the characteristics of human and social constitution, fostering universal values while highlighting those inherent in each student's culture. Teachers should involve students in classes and other activities, teach them to care for and respect public spaces, as well as other citizens, among other things. Society must recognize that, while individuals can learn on their own, they also need to learn collectively and interactively with others etc (ZWESTCH; ZWESTCH, 2015. p. 1539).

Thus, it is evident that the school is a place where citizenship can be built and social participation in public decision-making can be encouraged. This is achieved through pedagogical practices that foster critical thinking, reflection, and curiosity, positioning the student as a transformative agent of local reality. Consequently, the student becomes a subject of rights and duties, which must be enjoyed and fulfilled for the common good.

Methodological Pathways of the Work

Lakatos and Marconi (1992) emphasize that methodology encompasses the most intensive part of the research, as it is through this process that the precise paths, forms, and methods to be used throughout the scientific work—from the introduction to the results and discussions—are outlined.

To achieve the objectives, methods that consider quantitative data, complemented by qualitative data, were adopted as the work strategy, in line with the interpretive approach as established by Gomes (2011).

Minayo (2011) points out that the qualitative approach encompasses the reality and subjectivity of the subjects, highlighting that this method "works with the universe of meanings, motives, aspirations, beliefs, values, and attitudes" (MINAYO, 2011, p. 21). The author emphasizes that while the quantitative approach is primarily concerned with statistical data, which is external to the observed reality, the qualitative approach is embedded in the empirical and therefore underscores the importance of both approaches in social research.

With this understanding and based on the work developed in the extension project involving students from public schools in Garanhuns, it was noted that due to the professional scope of graduates from the Pedagogy Licentiate course, which includes the early years of Elementary Education, it was necessary to make selections and present part of the collected data, analyses, and results without compromising the overall findings of the work. Thus, two of the schools involved in the project will be considered: the municipal school Instituto Presbiteriano de Heliópolis and the municipal school Silvino Almeida de Oliveira, with students aged between 9 and 12 years, distributed across two classes, one in the 6th grade and the other in the 5th grade of elementary education.

The work was carried out in three stages. The first stage consisted of constructing a work schedule in collaboration with the administration and teachers of the aforementioned schools. The purpose of this schedule was to organize the visit days to the institutions and to arrange the themes that would be presented among the 11 pre-established topics, according to the objectives of the work.

The themes were then systematized as planned, although the order of presentations was initially altered due to the understanding that Urban Legislation would serve as a foundation for understanding the others, and the schedule was established as follows:

1. Urban legislation;
2. Streets, neighborhoods, sectors, and housing conditions;
3. Infrastructure conditions related to basic sanitation services, water supply, health centers, schools, waste collection, and public lighting;
4. Quality of access roads to public transportation, including intra-urban, urban-rural, and intermunicipal routes;
5. Types of public transportation and their routes;
6. Location of various types of commerce, services (both public and private), and markets;
7. Parks and spaces designated for sports activities;
8. Cultural and artistic groups, leisure clubs, and religious temples;
9. Location and operation of associations and neighborhood councils;
10. Green areas and areas of environmental degradation;
11. Security and quality of life.

After organizing the sequence of theme presentations, starting with Urban Legislation, the finalization of the schedule was completed, considering the availability of time slots within the regular class schedule of the selected groups, with the consent of the teachers. It was decided that visits to the schools would occur every two months, with two themes being presented and discussed each time.

The second stage consisted of presenting the themes using a Datashow at the mentioned schools. The themes were delivered in clear language, appropriate for the age/grade level of the students. Debates were held at the end of each presentation, although students were encouraged to participate during the exposition of the themes as well.

The third and final stage took place during the 12th visit to the schools, with the aim of collecting the final research data specifically, the final data needed to evaluate the work conducted.

For this purpose, the classes in each school were divided into teams. The following table (Table 1) shows the number of teams and the number of students in each team, by school.

Table 1 – Division of Classes into Teams and Number of Members per Team, by School

PARTICIPATING SCGOOL	PARTICIPANTES GRADES	NUMBER OF STUDENTS PER CLASS	NUMBER OF TEAMS	NUMBER OF STUDENTS PER TEAM
Silvino Almeida	5th Grade	24	5	5 on average
Instituto Presbiteriano de Heliópolis	6th Grade	31	5	6 on average

Source: Project team, 2018.

For data collection, techniques were employed that allowed for both quantitative and qualitative approaches, as it is agreed with Minayo (2011, p. 25) when she emphasizes that "we believe in the fertile and fruitful relationship between quantitative and qualitative approaches, which should be seen as complementary opposites." Oliveira (2007) highlights that by combining quantitative and qualitative techniques in research, greater reliability in the analysis of results can be achieved.

The final data collection occurred in two stages. The first stage involved the application of a learning assessment through a structured questionnaire consisting of 13 closed questions for each team from the two schools. The questions were developed based on the 11 themes covered throughout the year, according to the activity schedule. For analyzing the students' responses, basic statistics were used, in the form of percentages, representing a quantitative analysis.

The second stage consisted of a qualitative analysis based on an image of a spatial arrangement of a fictional city, printed on A3 paper, where each team was asked to make observations on what they had learned throughout the year.

Thus, the analysis of the data obtained in the first stage was complemented by the analysis carried out in the second stage, in line with the views of Minayo (2011) and Oliveira (2007), who consider this a fertile and fruitful relationship, which was consolidated in the final data analysis by choosing the method of interpretation of meanings. According to Gomes (2011), this method is an advanced form of Bardin's (2016) content analysis.

The interpretation of meanings involves analyzing the following categories: "a) words; (b) actions; (c) set of interrelationships; (d) groups; (e) institutions; (f) circumstances among other analytical bodies" (GOMES, et al., 2005, as cited in GOMES, 2011, p. 97). The pathways for

interpretation are: comprehensive reading of the selected material, exploration of this material, and the elaboration of a final interpretative synthesis.

.**Analysis and Discussion of Data**

This section presents the analysis and discussion of the data related to the completion of the Extension Project under review. The completion of the project primarily consisted of evaluating the work, which was conducted in two stages.

In the first stage, the evaluation involved administering a learning assessment through a structured questionnaire consisting of 13 closed questions. This technique was used to obtain the results, calculate the average percentages of correct and incorrect answers for each team, and then derive the overall percentage for each school involved in the project. The second stage of the evaluation focused on the students' teams observing and commenting on an image of a fictional city. This stage involved a qualitative analysis, seeking to interpret the meanings expressed in each team's comments regarding the identified problems in the city's organization and their suggestions for improvement.

It was observed that in this second stage of evaluation, the student teams presented similar aspects in their observations of the fictional city image, relating the knowledge acquired throughout the project to their daily lives. It is important to note that in Gomes' (2011) method of interpretation of meanings, the final interpretative synthesis is the last step in the process, where observations about the comments made by the participating teams from each school are presented.

Analysis of the Questionnaire Results as a Learning Assessment

For the first stage of evaluating the work carried out throughout the Extension Project, a learning assessment was conducted using a structured questionnaire consisting of 13 closed questions, based on the 11 themes covered during the year. The analysis of the data obtained from this learning assessment allowed for the inference that, quantitatively, the expected results were achieved. This indicates that the teams from *Instituto Presbiteriano de Heliópolis and Silvino Almeida* schools were able to grasp the concepts discussed throughout the year, positively developing their ideas on the themes. As shown in Table 2, the number of correct answers was higher than the number of incorrect answers, which highlights the students' understanding of the content.

Table 2 – Learning Assessment Results in Percentages, by Team, by School

SCHOOLS	INSTITUTO PRESBITERIANO DE HELIÓPOLIS	SILVINO ALMEIDA
NUMBER OF TEAMS	5	5
PARTICIPATING GRADE	6th Grade	5th Grade
AVERAGE CORRECT ANSWERS	9,2	7,7
PERCENTAGE OF AVERAGE CORRECT RESPONSES	70,97%	59,23%
PERCENTAGE OF AVERAGE ERRORS	29, 03%	40,77%

Source: Project Team, 2018

Observing the data available in Table 2, it is noted that at *Instituto Presbiteriano de Heliópolis*, out of the 13 possible questions, the student teams answered an average of 9.2 correctly, corresponding to an overall average of 70.97% correct answers and an average of 29.03% incorrect answers. At Silvino Almeida school, the data indicates an average of 7.7 correct answers out of 13 possible questions, corresponding to an average percentage of 59.23% correct answers and 40.77% incorrect answers.
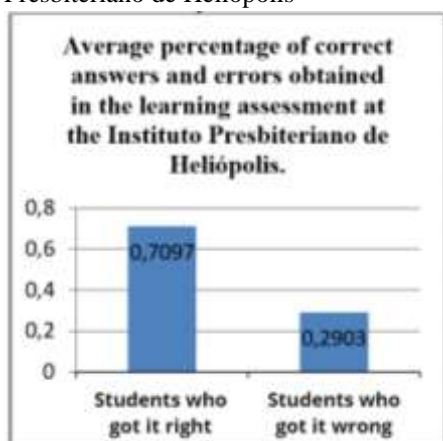
However, it is important to emphasize that the average percentages of correct and incorrect answers for the teams from both schools were calculated based on the individual percentages identified for each team. At *Instituto Presbiteriano de Heliópolis*, with a 6th-grade class, the results of the learning assessment for the teams ranged from 57.69% to 93.31%, corresponding to an average of 70.97%. This result indicates that out of the 13 possible questions, the average number of correct answers was 9.2, which signifies that the work developed was understood and incorporated by the students in a meaningful way.

At *Silvino Almeida* school, with a 5th-grade class, the learning assessment results for the teams ranged from 34.62% to 80.77%, corresponding to an average of 59.23%. This result indicates that out of the 13 possible questions, the average number of correct answers was 7.7, which also suggests that the work developed was understood and incorporated by the students in a meaningful way.
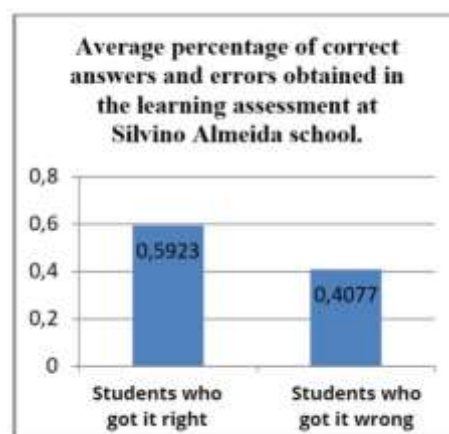
Figures 1 and 2 present the percentages of correct and incorrect answers in the students' learning assessment at the mentioned schools:

Chart 1 – Results obtained at the Instituto Presbiteriano de Heliópolis

Chart 2 – Results obtained at Silvino Almeida school

Average percentage of correct answers and errors obtained in the learning assessment at the Instituto Presbiteriano de Heliópolis.

0,7097 Students who got it right
0,2903 Students who got it wrong

Source: Extension project, 2018.

Average percentage of correct answers and errors obtained in the learning assessment at Silvino Almeida school.

0,5923 Students who got it right
0,4077 Students who got it wrong

Source: Extension project, 2018.

Observing Graphs 1 and 2, it is evident that there was a differentiation in the learning assessment results between the schools *Instituto Presbiteriano de Heliópolis and Silvino Almeida*. Several factors may have contributed to one school achieving better results than the other over the course of the year. Among the mentioned factors are: (1) the differing locations of the schools, particularly concerning the availability of general infrastructure; (2) the different ages and grades of the students; and (3) the availability of educational resources at the schools, such as Datashow, noting that at times, the Project team relied on oral presentations with the aid of didactic resources created by the authors. Therefore, it is confirmed that environmental, social, cultural, and other contexts influence the realities experienced by individuals. Brito, Arruda, and Contreras (2015, p. 18677) emphasize that "everyone has the same capacity to learn; what interferes are the social conditions for this learning, the context in which the individual is situated, and their reality."

In this sense, a child who is embedded in a disadvantaged social context, lacking the same access to educational and social resources as others, will not have the same learning opportunities as a child who is in a more favorable social context with at least minimal access to the necessary resources for their development (BRITO; ARRUDA; CONTRERAS, 2015).

Thus, based on this understanding and considering the results highlighted in the quantitative analysis, it is evident that the students comprehended the content developed throughout the year well, as the percentage of correct answers was higher than the percentage of incorrect ones. This partly supports the assertion that there was indeed an encouragement of social participation in the

construction of citizenship. However, to confirm this, it will be necessary to demonstrate the second form of evaluation, which addresses the qualitative data.

Analysis of the Results of Observation and Expression on the Graphic Representation

This phase involved providing each participating team with a printed A3 image of a fictional city (Figure 1), so that the students could observe and discuss the distribution of spaces according to the themes presented and debated throughout the year. The idea was for the students, working in teams, to assess whether the graphical representation aligned with what they understood as necessary to offer a good quality of life for the city's residents, and to share their observations and suggestions accordingly.

Figure 1 - Graphic Representation of an Imaginary City

Source: Project Team, 2018

To assist in the analysis, the letters a, b, c, d, and e were chosen to name the teams from both schools. The teams' responses were transcribed exactly as the students wrote them, with each team identified by its respective letter. In this context, the proposed changes or adjustments made by the students were analyzed according to the problems identified and the solutions proposed by each team. Based on the analyses, it was found that at *Instituto Presbiteriano de Heliópolis*, the teams identified existing urban problems and proposed viable solutions, as shown in Table 3.

Table 3 – Observations Made by Students Regarding the Theme of Pollution, Waste, and the Environment

TEAMS FROM THE 6TH GRADE OF THE INSTITUTO PRESBITERIANO DE HELIÓPOLIS
Open waste polluting the soil and air; we would create a landfill far from the city. Industries polluting the river and air should be located away from the river and city. Houses polluting the river should be placed within the city. (Team A)

Open garbage. Waste should be disposed of in a landfill. The houses are too close. (Team B)
River pollution could be addressed by relocating the houses. There's no market square in this city, which most cities have. This city also lacks a cemetery, which is necessary. We must be cautious with toxic waste as it is harmful to health. Factories should be moved away from residential areas, and we should not throw trash in the streets to avoid polluting the city. (Team C)
I wouldn't place a factory in the middle of the city. Factories should not be near rivers as they will cause pollution. The houses should be more spaced out, as the city feels cramped. The football field is too close to the road. We should have a cinema, churches, parks, libraries, and designated parks for community activities. (Team D)
Factories are polluting the rivers. Waste should be taken to a landfill far from the city. Agriculture should be organic. Houses should occupy vacant spaces. The city should use sustainable energy. (Team E)

Source: Project Team, 2018

It can be observed that in the responses given by the teams, there is a connection between the terms pollution and waste. To address the issue of waste, the teams proposed the construction of a sanitary landfill in the city. To minimize water pollution, they emphasized the need to maintain a certain distance between houses and factories from areas where streams or rivers are present.

Silva (2015, p. 14) highlights that "the proper destination for urban waste is a sanitary landfill, equipped with a structure for the treatment of gases and leachate." The author also emphasizes the importance of selective waste collection, which not only recycles waste but also reduces the amount of residue that will be deposited in the landfill.

Teams c and d also highlighted other important aspects in their responses, such as the need for the implementation of urban facilities, for example, markets, soccer fields, cemeteries, libraries, parks, schools, cinemas, among others. Team "e" specifically mentioned something different from the others: the need to promote organic agriculture and the use of renewable energy sources. This suggests that, in addition to concerns about existing environmental problems, the students on this team were also concerned about food contamination due to the use of pesticides, as it is known that, besides harming human health, pesticides pose serious risks to the environment.

If a city proposes the use of organic agriculture, this means that producers and farmers will need to adopt sustainable techniques, that is, agroecological methods that allow for organic production without degrading nature (OLIVEIRA, 2018).

Regarding the responses from the teams at Escola Silvino Almeida, it can be seen in Table 3 that all of them addressed the themes of pollution and waste, closely aligning with the responses from the teams at *Instituto Presbiteriano de Heliópolis*.

Although the teams showed some difficulty in writing, this did not interfere with the meaning attributed to their observations. There is a concern about the theme of water pollution, justified by the argument that water is essential for the life of all living beings. To address this problem, the teams emphasized the need to maintain a distance between factories and residences from rivers and streams. In addition to this concern, the teams mentioned urban waste, indicating the need for the construction of a sanitary landfill.

.

Table 4 - Observations Made by Students Regarding the Theme of Pollution, Waste, and the Environment

TEAMS FROM THE 5TH GRADE OF THE SILVINO ALMEIDA SCHOOL
We can't live without clean water. Don't throw trash on the ground; garbage pollutes everything. We shouldn't pollute the sea because without water, we can't survive. (Team A)
Factories need to be located far from rivers and houses because they are polluting the water. Fish are dying, and the water is becoming contaminated with bacteria, making people sick and causing breathing problems. Children have no space to play, and the world is getting more polluted. Deforestation is excessive, and the seas are so dirty that there are no more fish, leading to a lack of fun. (Team B)
Landfills shouldn't be in the middle of the street; waste should go to a landfill. There should be a school and clothing stores. (Team C)
Don't pollute the water because it is important for us. If we don't take care of it, we can't live. Don't throw trash on the ground; garbage is everywhere. The forest is completely destroyed, and the lakes are polluted. (Team D)
Our opinion is that we must take care of our city because it is our home. We believe pollution should stop. It is also wrong to have a factory near the city, as it can harm children, the elderly, and pregnant women because of the smoke and smell. Instead of building houses, we should have green spaces. (Team E).

Source: Project Team, 2018

The students demonstrated in their responses a concern for public health by mentioning the problems generated by breathing air polluted by local factories and consuming water contaminated by toxic residues.

Team "b" highlighted the lack of spaces dedicated to children's recreation, noting that their neighborhood has few places for leisure and play. In this context, Gadotti (2013, p. 44) emphasizes that "the city scares children, who are increasingly confined to their homes. Children have the right to leave their homes, they have the right to reinvent their space in the city as their territory." When

observing the image of the imaginary city, the students made connections with their own daily lives, identifying the absence of parks, squares, and other such spaces.

Only team "c" addressed the lack of certain facilities, such as schools and clothing stores, among others, and identified blocks with vacant lots that could be used for constructing these facilities.

Based on the results obtained from the two evaluation stages mentioned, it can be concluded that the encouragement of participation occurred actively, enabling a greater understanding of the process of city-building and citizenship, and how people can participate by considering their rights and duties as citizens. As Callai (2003, p. 61) states, "if our concern is to form citizens, the basic starting point is to provide them with the conditions and tools to know and understand the reality in which they live." The author further emphasizes that learning is more meaningful when it is based on local phenomena, as sometimes a reality is known by some students and unknown by others (CALLAI, 2003).

With this understanding, the awareness of the importance of social participation in the process of city-building was fostered through constructivist pedagogical practices, aiming to encourage students to be critical, reflective, and inquisitive about issues related to the construction of the city. Although the teams addressed only specific themes in the second stage of evaluation, it is clear that they understood the basic needs of citizens and how people can contribute to building a harmonious, healthy, and just city.

Therefore, for a city to be harmonious, healthy, and just, it is necessary for people not only to understand their rights but also to be aware of their duties and urban laws, recognizing the city as both an individual and collective construction, where people shape spaces through their action.

Final considerations

A city is built through the interaction between people and the territory. Several authors, such as Oliveira, Lopes, and Sousa (2016), have contributed to this understanding. Thus, it is impossible to study urban space without relating it to the people who inhabit it, as the characteristics of the space are reflections of the actions of its inhabitants, who modify the space and are, in turn, modified by it.

The work carried out with the students from the participating schools demonstrated that the ideal place to encourage the development of citizenship and, consequently, social participation in the process of city-building is indeed the school. This was evidenced by the perceived change in the

students' attitudes, as reflected in their responses to both forms of evaluation—the learning assessment and their reflections, analyses, and suggestions for modifying the image of a fictional city.

For this construction to occur, it is necessary for people to participate in public management decisions, as established in the Federal Constitution (1988) and Law 10.257/2001, known as the City Statute. Both laws stipulate that participation should occur regardless of social class, race, etc., and that everyone should actively participate, enjoying the same rights and duties.

In this context, the school, as a formative space, can assist in the construction of citizenship by offering content and themes that consider what is established in the legislation and relate to the students' realities, thus helping them better understand their role in the process.

Therefore, the objective of the work is seen to be fulfilled when we observe that the majority of the students (70.97% in one school and 59.23% in another) were encouraged to be participative and active in the construction of the spaces they inhabit, as evidenced by their correct answers to the questions presented, as well as their harmonious, healthy, and just suggestions for changes to the image of a fictional city.

References

AFONSO, Lúcia. **A importância da escola na construção de uma cultura de promoção e defesa dos Direitos Humanos**. *In*. DESLANDES, Keila; LOURENÇO, Érika. (org). Por uma cultura dos Direitos Humanos na Escola: princípios, meios e fins. 2011. Belo Horizonte, MG: Fino Traço, 2011, p. 7-12. ISBN 978-85-8054-021-5.

BARROS, José D' Assunção. **Cidade e história**. Petrópolis, RJ: Vozes, 2007. ISBN 978-85.326-3445-0.

BARDIN, Laurence. **Análise de conteúdo**. Tradução: Luís Reto e Augusto Pinheiro. Título original: L'Analyse de Contenu. 70. ed. São Paulo: edições, 2016. ISBN 978-85-62938-04-7.

BECKER, Fernando. **O que é construtivismo**. UFRGS – PEAD, 2009/1. Disponível em: https://edisciplinas.usp.br/pluginfile.php/301477/mod_resource/content/0/Texto_07.pdf Acesso em 15 Set. 2019.

BRASIL. **Base Nacional Comum Curricular**. Ministério da Educação, Brasília- Distrito Federal, 2017. Disponível em: http://basenacionalcomum.mec.gov.br/images/BNCC_20dez_site.pdf Acesso em: 21 Jun. 2019.

BRASIL. [Constituição (1988)]. **Constituição da República Federativa Do Brasil de 1988**. Brasília, DF: Presidência da República, [2016]. Disponível em: http://www.planalto.gov.br/ccivil_03/constituicao/constituicao.htm Acesso em: 10 jul. 2019

BRASIL. Estatuto da Cidade. **Estatuto da Cidade: guia para implementação pelos municípios e cidadãos**. Lei n. 10.257, de 10 de julho de 2001, que estabelece diretrizes gerais da política urbana. 2. Ed. – Brasília: Câmara dos Deputados, Coordenação de Publicações, 2002.

BRASIL. **Lei nº 9.394, de 20 de dezembro de 1996**. **Estabelece as diretrizes e bases da educação nacional**, Brasília, DF, 1996. Disponível em: http://www.planalto.gov.br/ccivil_03/leis/L9394.htm Acesso em: 10 Jul. 2019.

BRITO, M. H. P; ARRUDA, N. A. O; CONTRERAS, H. S. H. **Escola, pobreza e aprendizagem: reflexões sobre a educabilidade**. *In*: EDUCERE - XII Congresso Nacional de Educação, Curitiba, p.18670-18683, Out. 2015. Disponível em: https://docplayer.com.br/11240115-Escola-pobreza-e-aprendizagem-reflexoes-sobre-a-educabilidade.html Acesso em: 29 set. 2019.

CALLAI, Helena Copetti. **O ensino de geografia: recortes espaciais para análise**. In: (org) CASTROGIOVANI, A. C.; CALLAI, H. C.; SCHAFFER, N. O. (et al). Geografia em sala de aula: práticas e reflexões. 4.ed. Porto Alegre: editora da UFRGS/associação dos Geógrafos brasileiros – seção Porto Alegre, 2003. p.57-63. ISBN 85-7025-706-6.

CAVALCANTI, Lana de Souza. **A Geografia e a realidade escolar contemporânea: avanços, caminhos, alternativas**. *In*: Anais do I seminário Nacional: currículo em movimento perspectiva atuais Belo Horizonte, Novembro, p.1-16, 2010. Disponível em: http://portal.mec.gov.br/docman/dezembro-2010-pdf/7167-3-3-geografia-realidade-escolar-lana-souza/file Acesso em: 20 Jun. 2019.

FREIRE, Paulo. **A concepção "bancária" da educação como instrumento da opressão. Seus pressupostos, sua crítica**. In: FREIRE, Paulo. Pedagogia do oprimido. 2005. 46. ed. Rio de Janeiro: Paz e Terra, 2005. p. 65-87. ISBN 978-7753-016-8.

FREIRE, Paulo. **Pedagogia da autonomia: saberes necessários à prática educativa**. (coleção leitura). São Paulo: Paz e Terra. 1996. ISBN 978-85-7753-015-1.

GADOTTI, Moacir. **A escola na cidade que educa**. Cadernos Cenpec, v.1. n.1, p. 133-139, 2006. Disponível em: http://cadernos.cenpec.org.br/cadernos/index.php/cadernos/article/view/160/189 Acesso em: 10 de Jun. de 2019.

GADOTTI, Moacir. **O bairro, a cidade, a criança e a educação integral**. In: GADOTTI, Moacir. Educação integral no Brasil: inovações em processo. 2009. São Paulo: editora e livraria Instituto Paulo Freire, 2009. p. 43-50. ISBN 978-85-61910-36-5

GOMES, Romeu. **Análise e interpretação de dados de pesquisa qualitativa**. *In*: DESLANDES, S. F.; GOMES, R.; MINAYO, M. C. S. Pesquisa social: teoria, método e criatividade. 2011. 30. ed. Petrópolis, RJ: Vozes, 2011, p. 79-10528. ISBN 978-85-326-1145-1.

MARCONI, Marina de Andrade; LAKATOS, Eva Maria. **Fundamentos de metodologia científica**. 5.ed. São Paulo: Atlas, 2003. ISBN 85-224-3397-6.

MINAYO, Maria Cecília de Souza. **O desafio da pesquisa social**. *In*: DESLANDES, S. F.; GOMES, R.; MINAYO, M. C. S. Pesquisa social: teoria, método e criatividade. 2011. 30. ed. Petrópolis, RJ: Vozes, 2011, p. 9- 27. ISBN 978-85-326-1145-1.

OLIVEIRA, Isabel Cristina Eiras de. **Estatuto da Cidade: para compreender**. Rio de Janeiro: IBAM/DUMA, 2001.

OLIVEIRA, Luiz Fernandes de; COSTA, Ricardo Cesar Rocha da. **Sociologia para jovens do século XXI**. Rio de Janeiro: Imperial Novo Milênio, 2007. ISBN: 978-85-99868-10-2.

OLIVEIRA, Maria Marly de. **Como fazer uma pesquisa qualitativa**. Petrópolis, RJ: Vozes, 2007. ISBN 978-85-326-3377-4.

OLIVEIRA, P. S. F; LOPES, D. C. L; SOUSA, L. M. **A cidade e o urbano no ensino de Geografia: considerações a partir da abordagem conceitual nos Parâmetros Curriculares Nacionais – PCNs**. *In*: XVIII Encontro Nacional de Geógrafos, São Luís, MA, p.1-12, 2016. ISBN 978 -85-99907-07-8. Disponível em: http://www.eng2016.agb.org.br/resources/anais/7/1466034686_ARQUIVO_ARTIGOPOLIANA_VERSAOFINALENG2016.pdf Acesso em: 20 de fev. de 2019.

OLIVERIA, Shirley Soares de. **A agroecologia: possibilidades para o trabalho da educação ambiental nas escolas**. *In*: OLIVERIA, Shirley Soares de. Estudo da percepção ambiental dos estudantes de uma escola Municipal da zona rural de Bonito – PE. 2018. Trabalho de conclusão de curso (curso de licenciatura plena em Ciências Biológicas) - Universidade Federal Rural de Pernambuco - Departamento de Biologia, Recife, 2018, p. 17-18. Disponível em: http://repository.ufrpe.br/bitstream/123456789/1122/1/tcc_shirleysoaresdeoliveira.pdf Acesso em: 29 set. 2019.

SANTOS, Milton. As cidades mutiladas. *In*: LERNER, Julião (ed). **O preconceito. Secretária da justiça e da defesa da cidadania**, São Paulo: IMESP, 1996-1997, p. 133-144. Disponível em: http://www.miltonsantos.com.br/site/wp-content/uploads/2011/12/As-cidadanias-mutiladas_MiltonSantos1996-1997SITE.pdf Acesso em: 10 jun. 2019.

SILVA, Aida Maria Monteiro. **Direitos Humanos, Cidadania e Democracia: noções fundamentais**. *In*: SILVA, Aida Maria Monteiro. Escola pública e a formação da cidadania: possibilidades e limites. 2000. Tese (Doutorado em educação) - Faculdade de Educação – Universidade de São Paulo, 2000, p.31-55. Disponível em: http://www.educadores.diaadia.pr.gov.br/arquivos/File/2010/artigos_teses/2010/Pedagogia/tcidadaniaesc.pdf Acesso em: 20 jun.2019.

SILVA, Aida Maria Monteiro. **Educação para cidadania**. Faculdade de Educação – Universidade de São Paulo, 2000, p.56-77.

SILVA, Edina da. **Possibilidades na redução do lixo urbano**. *In*: SILVA, Edina da. Educação ambiental: lixo urbano de problema e possibilidade. 2015. Especialização (curso de especialização em educação em direitos humanos) – Universidade Federal do Paraná (setor litoral), Paranaguá, 2015. Disponível em: https://acervodigital.ufpr.br/bitstream/handle/1884/42296/R%20-%20E%20-%20EDINA%20DA%20SILVA.pdf?sequence=1&isAllowed=y Acesso em: 20 set. 2019.

ZWETSCH, A. S.; ZWETSCH, P. S. **Escola: educação para cidadania**. *In*: XII CONGRESSO NACIONAL DE EDUCAÇÃO – EDUCERE, Curitiba, p. 1530-1542, 2015. Disponível em: https://educere.bruc.com.br/arquivo/pdf2015/19414_10942.pdf Acesso em: 12 jun. 2019.

_____